STATE OF NEW YORK PUBLIC SERVICE COMMISSION

At a session of the Public Service Commission held in the City of Albany on February 7, 2019

COMMISSIONERS PRESENT:

John B. Rhodes, Chair

Gregg C. Sayre

Diane X. Burman

James S. Alesi

CASE 18-E-0548 - Tariff Filing by Consolidated Edison Company of New York, Inc. to Modify Its Electric Tariff Schedule, P.S.C. No. 10, to Establish Rider AB - Smart Home Rate.

CASE 18-E-0549 - Tariff Filing by Orange and Rockland Utilities, Inc. to Modify Its Electric Tariff Schedule, P.S.C. No. 3, to Establish Rider J - Smart Home Rate.

ORDER APPROVING TARIFF AMENDMENTS WITH MODIFICATIONS

(Issued and Effective February 7, 2019)

BY THE COMMISSION:

INTRODUCTION

On August 23, 2018, Consolidated Edison Company of New York, Inc. (Con Edison) and Orange and Rockland Utilities, Inc. (O&R) (collectively the Companies) filed proposed amendments to their electric tariff schedules, P.S.C. No. 10, and P.S.C. No. 3, respectively. The Companies propose to establish a Smart Home Rate (SHR) Demonstration Project (SHR Demo) under new Riders AB for Con Edison, and J for O&R, applicable to full service Residential/Religious customers in service classification No. 1 (S.C. 1).

The focus of the SHR Demo is to gauge customer acceptance of innovative rate structures combined with proactive energy management tools and technology, which when used effectively, will reward customers for managing their usage in ways that support the needs of the energy system as a whole. The rate designs are intended to be more reflective of cost drivers on the Companies' transmission and distribution systems, as well as reflective of the energy and capacity markets. The Companies expect to enroll approximately 2,350 participants in a SHR demonstration project and begin the program in April 2019. The SHR Demo is expected to conclude at the end of June 2021. By this Order, the Commission approves the Companies' proposed tariff amendments listed in the Appendix, with modifications, as discussed below.

BACKGROUND

In the Track Two Order, 1 the Commission directed each of New York State's six large investor-owned electricity utilities to develop and file one or more SHR Demo proposals consistent with guidelines in the Order, on or before February 1, 2017. The SHR Demo concept is intended to advance ratemaking reform and encourage active market participation by combining opt-in, time-variant pricing, with price-responsive residential demand management and energy information technologies and services that enable program participants to more fully exploit distributed energy resources (DERs) and energy management responses. Each utility was directed to collaborate with the New York State Energy Research & Development Authority (NYSERDA)

¹ Case 14-M-0101, <u>Reforming the Energy Vision</u>, Order Adopting a Ratemaking and Utility Revenue Model Policy Framework (issued May 19, 2016) (Track Two Order).

to develop SHR pilot programs, including necessary promotional and customer education materials.

The Companies filed their SHR demonstration proposal jointly on February 1, 2017 in compliance with the Track Two Order. By letter dated June 6, 2017, Department of Public Service staff (Staff) advised the Companies that Staff found that the proposal was in compliance with the demonstration project guidelines established in the Track One Order, 2 and the SHR demonstration concept objectives defined in the Track Two In addition to proposed tariff amendments, the Companies submitted a SHR Implementation Plan on August 27, 2018.3

Smart Home Rate Demonstration Project Overview

The Con Edison and O&R SHR proposal is comprised of two tracks that will investigate various SHR design components and responsive home automation technologies. Both tracks require that participating customers live in single-family homes with advanced metering infrastructure (AMI) installed before June 1, 2018, 4 and take both delivery and supply service from the utility. In addition, customers will be required to have central air conditioning (Central AC) to be eligible to participate in Track 1, and must have a rooftop solar photovoltaic (PV) system to participate in Track 2.

² Case 14-M-0101, supra, Order Adopting a Regulatory Policy Framework and Implementation Plan (issued February 27, 2015) (Track One Order).

³ Case 14-M-0101, supra, Smart Home Rate REV Demonstration Project Implementation Plan (filed August 27, 2018) (Implementation Plan).

⁴ Based on the current status of the Companies' respective AMI rollouts, customers in portions of Staten Island and Westchester County in the Con Edison service territory, and portions of Rockland County in the O&R service territory, will be eligible to participate.

Customers that opt to participate in Track 1 will be randomly assigned to either one of two new demand-based rate structures, Rate I and Rate II described in greater detail below, or to a control group that will remain on the current S.C. 1 rate. Customers participating in either of the two demand-based rate options will be provided with a new smart thermostat device (or may use their existing smart thermostat device if compatible) which will be connected to an energy management platform accessible to customers through a mobile application. Customers assigned to the control group will not receive a smart thermostat and will not be provided access to the energy management platform. Under Track 1, the Companies expect to recruit approximately 750 customers into each rate treatment (Rate I, Rate II, and the control group) for a total of 2,250 opt-in participants to achieve sufficient statistical significance in this rate comparison.⁵

Track 2 will evaluate the use of battery energy storage as an enabling technology for participants with existing solar PV generation. Customers participating in Track 2 will be enrolled in Rate I and provided a battery energy storage system which will be connected to a price-responsive automation platform. The Companies expect to recruit approximately 100 customers. While no control groups will be tested as part of Track 2, as an alternative, the Companies will provide statistically-matched comparisons with similar residences with net-metered solar systems.

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⁵ All eligible customers from both Companies will form a general recruitment pool, separate for each Track, and customers will be enrolled on a first come first served basis until the total enrollment targets are met.

TARIFF FILINGS

To effectuate the SHR Demo, the Companies propose new riders for their tariffs; Rider AB for Con Edison, and Rider J for O&R. These riders would only be applicable to SHR Demo participants. The Companies will solicit customers for opt-in enrollment in the SHR. Such participants must be full service customers served under S.C. 1 of the Companies' respective tariffs since each of the rate options include time-varying energy supply charges. Additionally, participants must have an AMI meter with the communications enabled since each of the delivery rate options are demand-based. In addition, the Companies propose a new payment structure for net exported energy by customers participating in Track 2.

Participating customers may take service under these rates for the duration of the SHR demonstration project, with the ability to discontinue participation at any time and resume service under the S.C. 1 rate. Such customers may not opt-in again for the duration of the SHR Demo. SHR Demo service will begin with a customer's first billing period inclusive of the date of enrollment and will continue through the conclusion of the SHR Demo project or if the customer requests to return to the S.C. 1 rate. Participating customers are subject to all other rates, charges, terms, and conditions under S.C. 1. Customers participating in the SHR Demo are prohibited from also taking service under Riders R or T at Con Edison, and under

⁶ As defined in Con Edison's tariff, P.S.C. No. 10 - Electricity.

⁷ Con Edison's Riders R and T are the Net Metering and Value Stack Tariff for Customer-Generators, and Commercial Demand Response Programs, respectively.

Riders D, E, F, I or N at O&R.⁸ Upon conclusion of the SHR Demo, customers taking service under Riders AB and J will transfer to their previously applicable S.C. 1 rate.

Rate Structures

The two new rate structures established by these riders (Rate I and Rate II) are designed to be revenue neutral on a customer class basis. Both rates are comprised of two supply components and three delivery components. The supply components include: (1) a supply charge based on the day-ahead hourly locational based marginal pricing (LBMP) as set by the New York Independent System Operator (NYISO); and, (2) generation capacity charges which include a critical peak event component. Delivery charges include: (1) the standard S.C. 1 customer charge; (2) demand-based delivery charges designed to recover embedded costs of transmission and distribution investments; and, (3) critical peak distribution and transmission event charges applied during specified events, which will be called on a day-ahead basis. The critical peak charges are designed to encourage reductions in customer demand to avoid or reduce the need for future investment in generation, transmission and distribution capacity. The Companies propose to call up to 10 events of each type per year, or up to 40 hours of generation, transmission and distribution events per year. Each event will last between three and eight hours. Events of different types may be called on the same day to reflect differences in system and distribution peaks.

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⁸ O&R's Riders D, E, F, I, and N are the Direct Load Control Program, Commercial System Relief Program, Distribution Load Relief Program, Retail Access Program, and Net Metering and Value Stack Tariff for Customer-Generators, respectively.

Rate I

The daily demand delivery charge proposed by the Companies for Rate I is based on the customer's peak demand⁹ during each day's designated peak period, specifically, 12:00 PM to 8:00 PM, all days. Rate I participants will also be assessed a critical peak event charge when called by the Company, based on their respective demands during the critical peak event period. Rate I participants will be assessed supply charges based on the actual day-ahead hourly LBMP set by the NYISO for the relevant NYISO load zone in the Con Edison or O&R service territory where the customer is located. Generation Capacity costs assessed under Rate I will be recovered through critical peak event charges.

Rate II

The Rate II demand delivery charge proposed by the Companies is based on a subscription for peak demand, up to a specified number of kilowatt (kW). Participants may either choose a subscribed demand level themselves, 10 or allow the applicable Company to determine subscribed demand based on the customer's load characteristics over the prior 12-month period. 11 Rate II customers will be assessed an overage charge if their demand exceeds their subscribed demand during designated critical peak events. Such overage charges will be based on the

9 Measured as the highest integrated 60-minute demand occurring entirely between the hours of Noon and 8:00 PM.

¹⁰ Customers may elect either 75 percent, or 125 percent of their default Subscribed Demand level.

Default Subscribed Demand level will be established for each customer by calculating the 95th percentile of the customer's demand occurring between the hours of noon to 8:00 PM during the months of June through September in the year prior to the customer commencing service under the SHR Demo.

difference between maximum demand used during the time of the critical peak event and the subscribed demand. Rate II participants will be assessed supply charges based on the actual day-ahead hourly LBMP set by the NYISO for the relevant NYISO load zone in the Con Edison or O&R service territory where each participant is located. Generation Capacity costs assessed under Rate II will be recovered through the subscribed demand charge, as well as overage charges during critical peak event charges. 12

Export Credits for Track 2 Participants

SHR participants with battery storage-solar PV generation participating in Track 2 are eligible for export credits the under Rate I. Track 2 participants will receive a credit for energy for any hour in a monthly billing period where there is a net export into the Company's system. The credit will be determined by multiplying the exported kilowatt hour (kWh) in that hour by the NYISO's day-ahead LBMP for the applicable NYISO electric load zone, adjusted by the Factor of Adjustment for Losses. Additionally, If a Track 2 participant exports power during a critical generation event and has a maximum integrated 60-minute demand of less than zero, the participant will receive a credit for the minimum integrated 60-minute level of export at the Critical Peak Event Charge applicable to that event. Similarly, sustained export of generated electricity during either a transmission or

¹² 90 percent of the generation capacity costs will be included in the Generation Capacity Subscribed Demand Charge, the remaining 10 percent will be included in the Generation Capacity Critical Peak Event charges.

 $^{^{13}}$ Con Edison's proposed tariff Leaf No. 327.14, Revision 0, and $\rm O\&R's$ proposed tariff Leaf No. 167, Revision 3.

distribution event would be compensated by bill credits based on transmission and distribution event rates, respectively.

Price Guarantee

SHR participants in Track 1, under either Rate I or II, will receive a price guarantee for the first 12 months the customer takes service under the program. In the event a customer's total annual cost is higher than what they would have been under their standard S.C. No. 1 service classification rates, the customer will be provided with a credit for the difference at the end of the first year of their enrolment in the program. SHR participants under Track 2 will receive no such price guarantee, because they received a battery storage system free of charge that they will be able to keep after the SHR Demo expires. The cost of the price guarantee will be included in Con Edison's Monthly Adjustment Charge (MAC) and O&R's Energy Cost Adjustment (ECA).

The Companies complied with the requirements of newspaper publication pursuant to Public Service Law §66(12)(b) and 16 NYCRR §720-8.1 for their tariff filings.

NOTICE OF PROPOSED RULE MAKING

Pursuant to the State Administration Procedure Act (SAPA) §202(1), Notices of Proposed Rulemaking were published in the <u>State Register</u> on September 26, 2018 [SAPA Nos. 18-E-0548SP1 and 18-E-0549SP1]. The time for submission of comments pursuant to the Notices expired on November 26, 2018 and no comments were received.

LEGAL AUTHORITY

Pursuant to Public Service Law (PSL) §§5, 65(1) 66(8), 66(1), and 66(12), the Commission has the legal authority to

review proposed tariff leaves, as well as modify, reject, or approve such filed tariffs. Therefore, the Commission has the legal authority to review the Companies' filings and approve and make effective tariff amendments, as prescribed in this Order.

DISCUSSION AND CONCLUSION

As defined in the Track Two Order, a SHR "combines highly granular time-based rates with location-and-time-based compensation for DER, in a manner that is managed automatically to optimize value for the system." 14 The Track Two Order further states that "the ideal SHR participant will combine generation (such as PV), electric vehicle charging, storage, and load management (such as a smart thermostat) with an inverter that allows two-way power flows and reads voltage and other system characteristics. 15 The SHR participant should be able to offer load shifting, peak reduction, voltage and other ancillary support, and automatic response on a time interval specified by the utility." By more closely reflecting variations in temporal and locational price components, while simultaneously offering a more immediate energy management response to price signals to sophisticated price signals, SHRs should allow customers to realize the financial benefits of DER in an efficient and convenient manner. In addition to this customer value, successful implementation of SHRs will support several Reforming the Energy Vision (REV) objectives, including avoided or deferred capacity investments, reductions in wholesale market prices, the system benefits of DER proliferation, and a reduction of carbon emissions associated with reduced output from bulk generation peaking power plants.

¹⁴ Track Two Order, at 135.

 $^{^{15}}$ <u>Id</u>. at 135-136.

Although the tariff filings proposed by Con Edison and O&R do not fully realize the vision of SHRs the Commission has previously expressed, the SHRs will begin to test the ability of managed technologies to respond to price signals, and customer acceptance of such technologies, management strategies, and rates, at a measured and reasonable pace. The tariff filings submitted by Con Edison and O&R are reasonable, generally comport with the Commission's directives in the Track Two Order, and will advance the Commission's interest in testing the combination of granular rates and managed, responsive, technologies. Therefore, the tariff amendments are approved, subject to modifications, as discussed below.

The first of the modifications concerns the proposed tariff provisions for both Con Edison and O&R that describe the price guarantee. The proposed language in the tariff amendments is unclear as to which customers the price guarantee applies to. Therefore, the Companies are directed to modify the paragraphs describing the price guarantee to specifically state that the guarantee will be provided to all Rate I and Rate II customers whom are not provided with the battery storage system. ¹⁶

The next modification is a clarification as to the end date of the SHR Demo tariff provisions. As filed, the tariff revisions do not have an end date specified. Based on the Companies' current Implementation Plan, the SHR Demo is scheduled to cease its "Rates and Technology Activated" phase at the end of the second quarter, 2021, 17 however, Staff reports that during the course of its review it determined that the Companies now plan to delay offering the SHR Demo rates due to delays in prerequisite AMI-related information technology

¹⁶ Leaf 327.18 for Con Edison and Leaf 169.2 for O&R.

¹⁷ Implementation Plan, at 18.

projects. According to Staff, the Companies now plan to operate Track 2 of the SHR Demo between October 1, 2019 through September 30, 2021, and to operate Track 1 of the SHR Demo between April 1, 2020 and March 31, 2022. 18 The Companies are directed to file further tariff amendments designating March 31, 2022 as the end date for Track 1 of the SHR Demo, and designating September 30, 2021 as the end date for Track 2 of the SHR Demo, within the Applicability sections of the tariff Riders.

Modifications are also required where the tariff amendments address the supply charges for participating customers. The supply charges, as described in the tariff amendments, will be based on the actual day-ahead hourly LBMP set by the NYISO for the relevant NYISO load zone in the Con Edison or O&R service territory where each participant is located. The proposed tariff amendments do not, however, excluded the costs or benefits of the Companies' hedging programs from the tariff provisions applicable to the SHR Demo participant. Assessing these costs or benefits masks the true day-ahead hourly LBMP. As such, the Companies are directed to modify their Supply Charge tariff provision to exclude SHR participants from the applicability of the hedging programs, like the exclusion applicable to mandatory hourly priced customers.

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¹⁸ Staff reports that the Companies' reasoning for further delaying Track 1 compared to Track 2 is so that Track 1 customers, whose participation is based on central air conditioning, would begin participation immediately prior to the summer period when their DER would be managed. Track 2 customers with battery systems, on the other hand, can be managed year-round.

Finally, Con Edison is directed to file tariff amendments to Leaf 327.13, which specifies the restrictions to participating in the SHR Demo, such that SHR participants are precluded from taking service under the Direct Load Control The reason for this modification is that, unlike the restrictions proposed by O&R, Con Edison's tariff amendments do not restrict SHR Demo participants from also participating in the Direct Load Control Program under Rider L. 19 Similar to the SHR Demo, Con Edison's Rider L includes direct utility control of smart thermostats during specified periods, however, Rider L lacks the smart management platform and integration of such management into the applicable rate structure that the SHR Demo provides. Therefore, allowing a SHR Demo participant to also receive payment for load relief provided under both Rider L and the SHR Demo would result in a double-payment for the same product.

The tariff amendments with the modifications directed in this Order will effectuate the SHR Demo projects, as described in the Companies' SHR Demo Implementation Plan and are approved. The Companies shall file tariff amendments to effectuate the modifications directed in this Order on not less than five days' notice, to become effective on March 1, 2019. Since the Companies will be filing such tariff amendments in compliance with this Order, the requirements for newspaper publication of such amendments are waived.

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¹⁹ Staff reports that Con Edison states that it made an error in its filing by not excluding SHR Demo participants from also participating in Rider L.

The Commission orders:

- 1. The tariff amendments listed in the Appendix shall become effective on March 1, 2019, provided that Consolidated Edison Company of New York, Inc. and Orange and Rockland Utilities, Inc. file further revisions as discussed in the body of this Order on not less than five days' notice to become effective on March 1, 2019.
- 2. The requirements of Public Service Law §66(12)(b) and 16 NYCRR §720-8.1, as to newspaper publication with respect to the tariff filings directed in Ordering Clause No. 1, are waived.
- 3. In the Secretary's sole discretion, the deadlines set forth in this order may be extended. Any request for an extension must be in writing, must include a justification for the extension, and must be filed at least one day prior to the affected deadline.
- 4. This proceeding is closed pending compliance with Ordering Clause No. 1.

By the Commission,

(SIGNED) KATHLEEN H. BURGESS Secretary

SUBJECT: Filing by CONSOLIDATED EDISON COMPANY OF NEW YORK, INC.

Amendments to Schedule P.S.C. No. 10 - Electricity

Original Leaves Nos. 327.12, 327.13, 327.14, 327.15, 327.16, 327.17, 327.18

Second Revised Leaf No. 330.1

Tenth Revised Leaf No. 6

Eleventh Revised Leaf No. 343

Fifteenth Revised Leaf No. 177

Issued: August 23, 2018 Effective: March 1, 2019

Filing by ORANGE AND ROCKLAND UTILITIES, INC.

Amendments to Schedule P.S.C. No. 3 - Electricity

Original Leaves Nos. 169.1, 169.2 Third Revised Leaves Nos. 166, 167, 168, 169 Seventh Revised Leaf No. 251 Tenth Revised Leaf No. 4

Issued: August 23, 2018 Effective: March 1, 2019

SAPAS:

18-E-0548SP1 and $18-E-0549SP1-\underline{STATE}$ REGISTER - September 26, 2018.

NEWSPAPER PUBLICATION: September 7, 14, 21, and 28, 2018. September 13, 20, 27, and October 4, 2018.